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09/477,298 01/04/2000 CHRISTOPHER E. TEARGE			
	EXAMINER BLOUNT, STEVEN		
7001 ROSS AVENUE			
DALLAS, TX 752012980	PAPER NUMBER		
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DATE MAILED: 03/31/	DATE MAILED: 03/31/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		l
	09/477.298	Pearce	e et al	1
Office Action Summary	Examiner		Group Art Unit	
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 Extensions of time may be available under the provisions of 37 CFR 1. from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply in the period for reply is specified above, such period shall, by default, Failure to reply within the set or extended period for reply will, by statu 	oly within the statutory minir	num of thirty (30)) days will be considered of this communication	ation .
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 ☐ This action is FINAL. ☐ Since this application is in condition for allowance except accordance with the practice under Ex parte Quayle, 193 	for formal matters, pro 5 C.D. 1 1; 453 O.G. 2	secution-as-t 13.	o-tne merits is c	losed III
Disposition of Claims ☑ Claim(s)		is/ar	e pending in the a	pplication.
⊠ Claim(s)		is/ar	e withdrawn from	consideration.
Of the above claim(s)		is/are withdrawn from consideration.		
☐ Claim(s)		 io /ar	e rejected.	
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Application Papers	5			
Dreffenomen's Patent Drawi	ing Review, PTO-948.		_	
	IS Lappiove	d 🗆 disappro	oved.	
☐ The proposed drawing correction, filed on is/are objection.	ected to by the Examine	er.		
☐ The specification is objected to by the Examiner.	•			
☐ The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. § 119 (a)-(d)				
☐ Acknowledgment is made of a claim for foreign priority ☐ All ☐ Some* ☐ None of the CERTIFIED copies	of the phonty document			
☐ received in Application No. (Series Code/Serial Nur ☐ received in this national stage application from the	international bareas (i	011111111111111111111111111111111111111	(a)).	
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Attachment(s) Attachment(s) Information Disclosure Statement(s), PTO-1449, Paper	er No(s).		Summary, PTO-4	
Notice of Reference(s) Cited, P10-032		□ Notice of I	mormai Paleili A	oplication, PTO-15
☐ Notice of Draftsperson's Patent Drawing Review, PTC)-9 4 8	□ Other		
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U. S. Patent and Trademark Office PTO-326 (Rev. 9-97) Part of Paper No.

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 4 11, 14 23, 26 31, 34 40, and 42 43, and 46 49 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,259,701 to Shur et al.

With regard to claim 1, Shur et al teach a method of establishing a multicast communications session comprising sending multicast media to a group address (col 2 line 57; note also the multicast group address in col 4 lines 33 - 40, and the multicast/unicast servers 120 and 121 in figure 1) and communicating the media to a unicast device to enable a multicast communications session. Shur et al do not however teach the members at the receiving ends to be telephony devices per se, although they do teach computer terminals 110, etc. in figure 1.

The substitution of telephony devices for computer terminals in this example is an exchange of well known equivalents in view of the well developed state of the art of carrying voice over Internet telephony and the fact that many computers now allow for the capability of plugging in microphones (in conjunction with their speakers) to allow for conversation. Further,

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the examiner notes that in applicants invention (see fig 1, members 42 and 44), telephones and computers are both applied.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have used telephone devices in place of the computer terminals in Schur et al, in view of this state of the art, in order to carry out an "audio" communication over a network.

With regard to claim 4, since it is a "conference", Shur et al's teaching of sending multicast media to the intermediary must work in reverse, such that unicast must be able to be sent to multicast.

With regard to claim 5, associating the first logical port of the intermediary with a unicast device and modifying source address received in the received media to specify a second logical port of the intermediary associated with the multicast group address is taught in figure 1, wherein the member 120 is interfaced with members 113 and 102, and note also the address translation described in col 3 lines 33+, col 4 lines 38+, col 5 lines 9+, the mention of the unicast address on the MUS, and the discussion of UDP sockets in col 7 lines 64+ and also col 8 lines 5+.

With regard to claim 6, association of the unicast device with the intermediary comprising use of a UDP logical port is taught in col 7 lines 64+.

With regard to claim 7, modifying source and port information: see col 8 lines 5+ and note that this is well known.

With regard to claim 8, applicant is requested to see figure 1 and observe that the connection UR - UR between members 112 and 113 allows unicast - unicast communication,

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whereas the connection 113 - 102 would require by its very function that a member 120 (MUS) be provided in order to provide the necessary address conversion, and members communicating through member 113 would recognize that it is not possible to communicate from unicast to multicast or vice versa without a member 120. Note also the operation of 206 in col 4, lines 5+.

With regard to claim 9, two multicast devices 103/104 are shown in figure 1.

With regard to claim 10, the flow chart in figure 4 shows steps such as 407 where client selection occurs and 409 (push button) which would require the unicast device be placed on hold. With regard to the following claims, note the following, in addition to the preceding rejections:

Cl 11: plurality of terminals 103, 104 (fig 1), as noted above, unicast member 113, multicast member 102, mus member 120 providing unicast to multicast communication; Cl 14: see above, and note the MUS receives information from 113 and provides it to 102; Cl 15: a "call manager" is mentioned in col 4, line 16 (http server 206) which is used to initiate the session, and it is also noted that it is within the MUS server; Cl 16: the MUS is a logical device coupled to the network which uses software to operate members such as 204 in figure 2 and also member 206 in figure 2.

Cl 17: The abstract, line 3, states that IP is used on both multicast and unicast networks. Cl 18: RTP for multicast streaming is taught in col 6, line 51; Cl 19: multiple terminals are shown in figure 1 suggesting a conference, and also, a "Conference Visual Tool" is taught in col 4, line 24; Cl 20: the "placed on hold" limitation is discussed above (claim 10); Cl 21: note the rejection of claim 1, and further note the plurality of terminals 111, 103, and 104, and note that

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there are two MUS devices (120 and 121); Cl 22: both MUS devices can receive unicast information and communicate it to the multicast group address as noted above; Cl 23: note the two MUS devices, and also the discussion of member 206 above; Cl 26: see the rejection of claim 16 above; Cl 27: see line 3 of the abstract where IP is discussed; Cl 28: See col 6 line 50 where RTP is discussed; Cl 29: a Visual Conference Tool is mentioned in col 4, line 24; Cl 30: as discussed with respect to claim 20, placing the unicast devices on hold is inherent to the process steps such as 506 shown in figure 5; Cl 31: as noted above, the operation of the MUS's 201 is carried out through stored software (this applies to the rejection of claims 32 - 39 which follow); Cl 34: see the rejection of claim 31, and note that receiving unicast media and transmitting it to the multicast group address is taught in Shur et al as described with respect to claim 4; Cl 35: see the rejection of claim 5 above, and note the fact that the functions of member 201 in figure 2 are carried out using software as noted above; Cl 36: UDP is taught in col 4 last line and col 5, and IP is taught in the abstract, lines 3+; Cl 37: changing information in the packet is taught in col 8 lines 5+; Cl 38: a Visual Conference Tool is taught in col 4, lines 24+; Cl 39: see the rejections above, including the use of software in the MUS, and note also figure 4, steps 407+.

Cl 40: note the plurality of multicast devices 111, 103, 104, etc, and further note that member 120 (and its constituent component 206) is essentially a "call manager" that establishes a communication session for member 102; Cl 42: see the rejection of the claims noted above which discuss figure 4 and its relation to putting one of the media stations (in this case, members 103,

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figure 1, and communicates it to members 111 also as shown, to enable a unicast communication device to participate in a communication with a multicast communication device; Cl 46: see the interface between members 113/120 and 120/103 in figure 1 and also see the discussion of the relevant ports in col 7 lines 67+ and further note the rejection of claim 1 above, especially the pertinent portions mentioned concerning address translation: col 3 lines 33+, col 4 lines 38+, col 5 lines 9+; Cl 47: the MUS communicates the information to the unicast members 113, etc. as shown in figure 1; Cl 48: UDP ports are discussed in col 7, lines 63+; Cl 49: modification of the packets (and the headers, where it is well known that the addresses are located there) is taught, as mentioned previously, in col 8, lines 5+.

3. Claims 2, 12, 24, 32, and 44 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,259,701 to Shur et al as applied to claim 1 above, and further in view of U.S. patent 6,477,169 to Angle et al.

With regard to claim 2, Shur et al teach the invention as described above, but do not teach sorting the media at the intermediary. Angle et al teach sorting multicast data in order to provide a schedule. See col 2, lines 20 - 33. It would have been obvious to one of ordinary skill in the art at the time of the invention to have sorted the multicast data of Shur et al, in light of the teachings of Angle et al, in order to provide a means for directing the multicast data to the proper conference member. With regard to claim 12, as noted above, the intermediary is capable of sorting the multicast media. With regard to claim 24, sorting would be accomplished in both the

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first and second intermediaries; With regard to claim 32, note the rejection of claim 12 above with regard to sorting, and further note that this function is also implementable on a computer program. With regard to claim 44, see the rejection of claim 12, and note that in view of this rejection, the intermediary is capable of sorting the multicast information as well.

4. Claims 3, 13, 25, 33, and 41 and 45 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,259,701 to Shur et al as applied to claim 1 above, and further in view of U.S. patent 5,963,547 to O'Neil et al.

With regard to claim 3, Shur et al teach the invention as described above, but do not teach mixing the media at the intermediary. O'Neil et al teach mixing multicast data in order to "produce a broadcast audio mix" for a conference. See col 4, lines 5+ and the abstract. It would have been obvious to one of ordinary skill in the art at the time of the invention to have mixed the multicast data of Shur et al, in light of the teachings of O'Neil et al, in order to help facilitate the conference call. With regard to claim 13, see the rejection immediately above with respect to the intermediary being able to mix the multicast media. With regard to claim 25, the first and second intermediaries would be capable of mixing the data; with regard to claim 33, the mixing function taught in O'Neil is implementable in computer software, and with regard to claim 41, receiving and summing the multicast information is taught in column 4, lines 5+.

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Contact Information

5. Examiner Blount may be contacted at the Patent Office between the hours of 9:00 am to 5:30 P.M. Monday through Friday. His phone number is (703) 305-0319.

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